Natural under IMS/TM - Recovery Handling

This section describes recovery handling in the Natural IMS Interface. The following topics are covered:

- System and User Abends
- Non-Recoverable Errors
- Recoverable Errors

Additional Information

- **Natural IMS/TM Error Codes** - for a list of the error codes and messages that may be issued by the Natural IMS Interface (NII) refer to Natural IMS/TM Error Codes in the Natural Messages and Codes documentation.
- **Installation** - refer to Installing the Natural IMS Interface in the Natural Installation Guide for Mainframes.
- **Further information** - refer to the following topics:
  Environments | Components | Configuration Macros | Service Programs | Service Modules | Special Functions | User Exits | Special Functions

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System and User Abends

The Natural IMS interface is protected by an ESTAEX environment which takes control in case of an abend.

- If a user abend is detected, resources are cleaned up and the abend is percolated without giving control to Natural.
- If a system abend is detected, Natural is informed about the abend and, depending on the setting of the Natural profile parameter DU, Natural contines with an error message or terminates the session.

In both cases, you can produce a dump which represents the situation at the time when the error occurred (register contents, PSW, etc.). The dump is produced if DU=ON or if the user abend has requested this.

Non-Recoverable Errors

A non-recoverable error is a logical error detected by the Natural IMS interface which cannot be handled by Natural. These situations typically occur during startup, termination or terminal I/O. In all cases, the Natural runtime is not active and can thus not react to the error.

If a non-recoverable error is detected, the Natural IMS interface issues a NII error and terminates the session. The error message is also written to the IMS log and to the system log. Depending on the dump option in the error message table, a snap dump is produced.

If you do not wish a message to be written to the IMS log, set the ERRLHDR parameter of the NIMPARM macro explicitely to null, i.e. you specify "ERRLHDR=,".

If it is not possible to send the error message (for example if the GU has failed), the session abends (user abend).

Recoverable Errors

If a logical error is detected by the Natural IMS interface which can be handled by Natural, for example an invalid destionation for a report, a Natural error message is issued and Natural proceeds with its standard error handling.